

## **REMARKS**

### **I. Status of the claims and application**

Claims 1, 2, 7, 10, 26, and 31-34 are pending. Claims 3-6, 8-9, and 27-28 were previously canceled. Claims 11-25 and 29-30 are withdrawn. Claims 1, 7, 26, and 31-32 have been amended to recite that a megakaryocyte tyrosine kinase 1 that has the amino acid sequence of SEQ ID NO. 2. Support for this amendment is found throughout the specification; see, for instance, the legend for Figure 9 at page 9 of the specification and the third and fourth paragraphs of page 13.

### **II. Applicants overcome the Examiner's rejections**

1. The Examiner states that "[T]he title of the invention is not descriptive." Office Action at page 2. Applicants have amended the title to reflect that the claimed invention is directed to a "Novel Megakaryocytic Protein Tyrosine ~~Kinases~~ Kinase 1."

2. The Examiner states that "[T]he abstract of the disclosure is objected to because the abstract is in two paragraphs." Office Action at page 2. Accordingly, Applicants have combined the two paragraphs into one and have appended a clean copy of the abstract, on a separate sheet, to this paper.

3. The Examiner states that "Applicant is required to update the priority information to indicate the previously allowed application (Serial Number: 08/232,545)." Office Action at page 3. Applicants have amended page 1 of the specification to relate the lineage of the present application, *i.e.*, that it is a divisional application of U.S. application serial no. 08/232,545, filed on April 22, 1994, now U.S. patent No. 6,506,578. Applicants also have submitted an amended application data sheet conveying this lineage.

4. The Examiner rejected claims 1, 2, 7, 10, 26, and 31-34 under 35 U.S.C. § 112, second paragraph for (a) reciting "MKK1 protein"; (b) reciting "expression vector," which has no antecedent basis; and (c) claim 34, which depends from claim 33, because it is allegedly not further limiting. Office Action at page 3.

Applicants have amended the claims to recite a "megakaryocyte tyrosine kinase 1" and to specify that the megakaryocyte tyrosine kinase 1 protein has the amino acid sequence

of SEQ ID NO. 2. Applicants have deleted the word “expression” from claim 7. Applicants have, solely for the purposes of expediting prosecution, canceled claim 34. For these reasons, Applicants respectfully request that the Examiner withdraw these rejections.

5. The Examiner rejected claims 1, 7, 10, 26, and 33 under 35 U.S.C. § 112, first paragraph as lacking written description, because “the specification does not disclose all the polynucleotides encoding MKK1.” Office Action at page 4.

Applicants have amended claims 1 and 7 to recite that a megakaryocyte tyrosine kinase 1 protein has the amino acid sequence of SEQ ID NO. 2, for which there is sufficient written description support. For instance, the Examiner notes that “*with the exception of* MKK1 polynucleotide sequence of SEQ ID NO. 1 and the deduced polypeptide of SEQ ID NO. 2” (emphasis added, page 5), the skilled artisan allegedly cannot envision all the MKK1s previously claimed. That is, the skilled artisan *can* envision the presently claimed MKK1. With respect to claim 33, the skilled artisan can envision those nucleic acid sequences that encode a naturally occurring MKK1 and meet the recited hybridization criteria. Accordingly, Applicants submit that there is written description for the presently claimed invention and respectfully request that the Examiner withdraw this rejection.

6. The Examiner rejected claims 1, 7, 10, 26, and 33 under 35 U.S.C. § 112, first paragraph as lacking enablement because “the lack of description of the various MKK1 forms in the specification does not enable one of skilled in the art [to] make and/or use the invention.” Office Action at pages 6 and 7.

The Examiner states that “other than [the] nucleotide sequence of SEQ ID NO. 1 encoding MKK1 protein, the specification as filed fails to disclose any other nucleotide sequences.” The present claims are in concordance with the Examiner’s acknowledgement that the claims are enabled for a nucleotide sequence of SEQ ID NO. 1. With respect to claim 33, the skilled artisan can envision those nucleic acid sequences that encode a naturally occurring MKK1 and meet the recited hybridization criteria. Accordingly, Applicants respectfully request that the Examiner withdraw this rejection.

7. Claims 1 and 7 are rejected under 35 U.S.C. § 102(a) as being allegedly anticipated by Bennett *et al.*, *J. Biol. Chem.*, 269(2), pp. 1068-74, January 14, 1994, or Sakano *et al.*, *Oncogene*, 9(4), pp. 1155-61, April, 1994. Office Action at pages 8 and 9.

Applicants have filed herewith a declaration executed by Ricardo Martinez, a research scientist employed at Sugan, which is a collaborator of the assignee of the present application (Max-Planck). Dr. Martinez attests to the sequencing of the claimed megakaryocyte tyrosine kinase 1 before the publication date of Bennett *et al.* Since the declaration antedates both of the cited references, neither is available as prior art against the present claims. Accordingly, this rejection is moot.

8. Claims 10, 26, and 31-34 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Bennett *et al.*, *supra*, or Sakano *et al.*, *supra*, in view of Sambrook *et al.*, 1989, Chapters 11, 16, and 17. Office Action at pages 9-11.

For the reasons cited in the preceding subsection, Ricardo Martinez's declaration evidences possession of the DNA and amino acid sequences of megakaryocyte tyrosine kinase 1 prior to Bennett *et al.* and Sakano *et al.* Accordingly, neither may be combined with the referenced Sambrook publications. Therefore, this rejection is moot.

### III. Conclusion

Applicants believe that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Date

March 2, 2004

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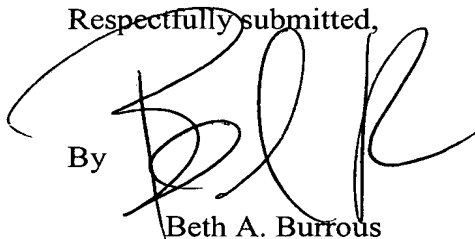
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Respectfully submitted,

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